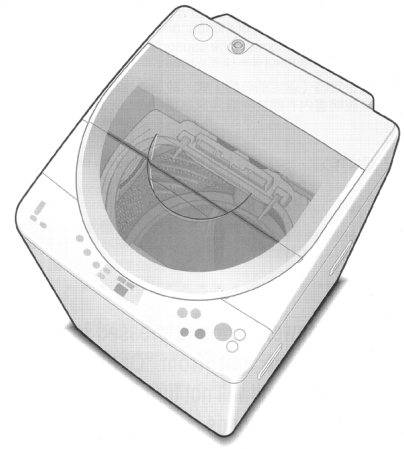
Order No.HUD0311343C3

Service Manual

Washing Machine



NA-F80GD

Product Color : White

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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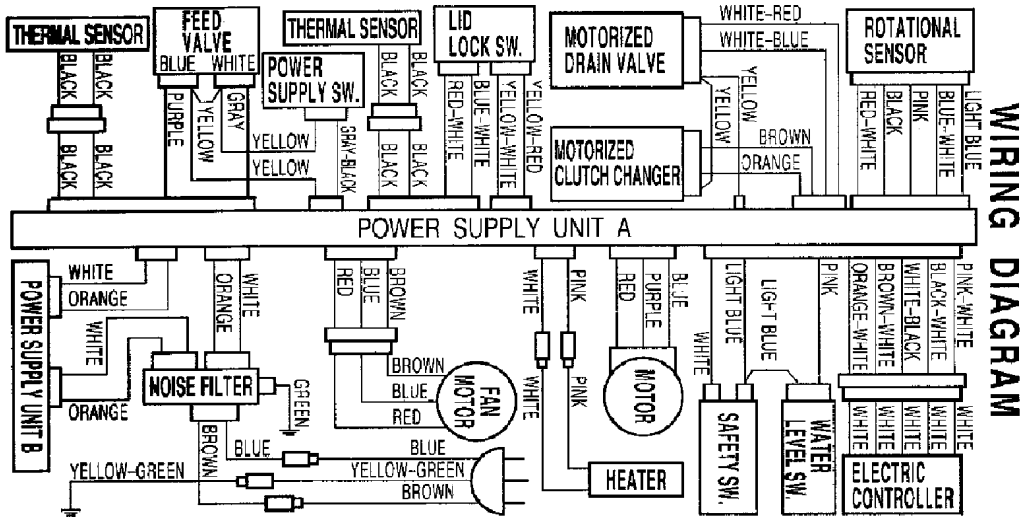
1 SPECIFICATIONS

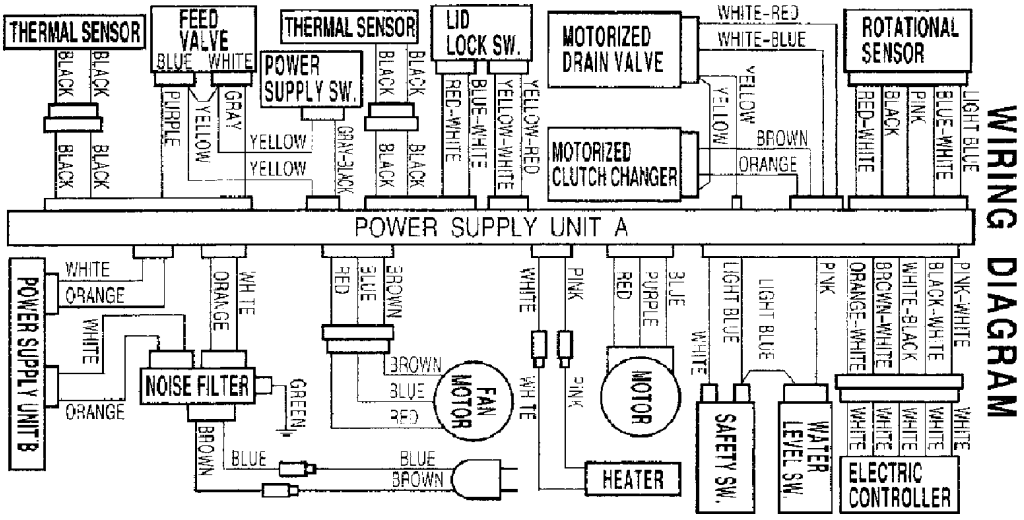
Power source	AC220V , 230V 50Hz		Spin r/min. (Clothes load)	830 r/min.		
Dimension	(Width)599mm (Depth)612mm (Height)1010mm		Machine weight	41kg		
Water level selector (standaedized water amount)	Pulsator washing	Centrifugal washing	Power consumption (Motor)		Input	Output
	67L - 8.0kg	67L - 8.0kg		Pulsator	300W	220W
	57L - 5.5kg	57L - 8.0kg		Centrifugal	300W	100W
	49L - 3.5kg	49L - 5.5kg	Heater (Dry)	770W		
	38L - 1.0kg	38L - 1.5kg	Safety switch	Lid and unbalance switch		
	22L - 0.3kg	22L - 0.3kg	Buzzer	Cycle-end buzzer, Give an alarm		
Standerdized water consumption (Normal)	125L		Thermal protector	Motor		
			Softener dispenser	Providing		
Operating Water pressure	0.03 to 1MPa (4.3p.s.i to 142p.s.i)		Bleach inlet	Providing		
			Lint filter	Providing		
			Auto power off	Providing		
Pulsator r/min. (Clothes load)	130 r/min.		Accessories	Pressure hose (Inlet hose) Feed valve joint A Service hose B unit		

2 SCHEMATIC DIAGRAM

2.1. For 3 pin plug



2.2. For 2 pin plug



3 PRODUCT INFORMATION

3.1. Timer type drying function

Below half the height of the stainless steel part of the tub represents a load of under 3.0kg.

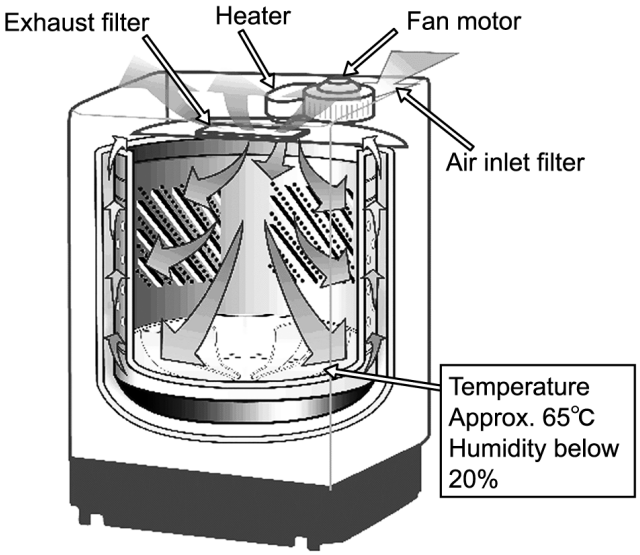
The heater, fan motor and fan case are providing inside of the panel, and drying function shall be operated by timer control.

Exhaust air including humid air shall be come out from upper portion of the tub through the exhaust filter.

<Approximate drying time>

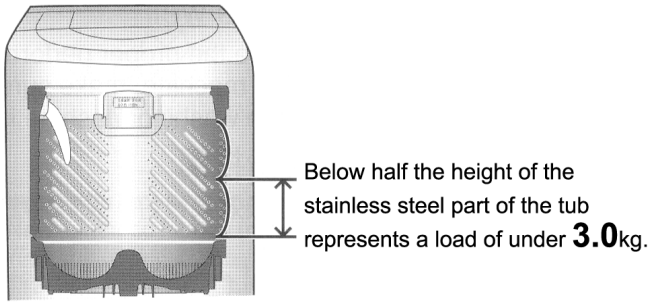
	Drying capacity	Necessary hours
1.	3.0kg	Approx. 3 hours
2.	2.0kg	Approx. 2-3 hours
3.	1.0kg	Approx. 1.5-2 hours
4.	0.5kg	Approx. 1-1.5 hours

***Dryed up conditions shall be changed against atmospheric temperature, humidity and installations.**



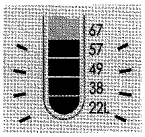
Dryer capacity 3.0kg

Putting in too many garments will lessen the dryer's effect and cause wrinkles.



Overfilling (over capacity) indicator

■When the water level indicator flashes



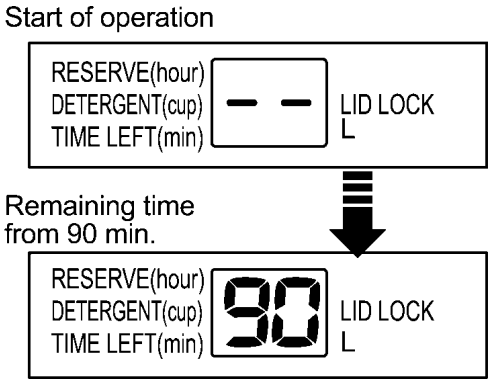
➡ The capacity exceeds 3.0kg.
(Flashes for about 30 seconds.)

Ex.) Remove the equivalent of one bath towel (300g)
・After about 30 seconds, Operation resumes.

・Over capacity detection is only enabled when inserting dry items for WASH & DRY with Normal Course.

Remaining time indication for drying

It is not possible to indicate remaining time more than 100 min. due to two digit. therefore, even select more than 2 hours (2 and 3 hours), "--"mark shall be indicated at start of drying and indicate proper remaining time from 90 min.
Remaining time shall be decreased on every one minute.



Drying process (Power save course)

			Heater ON	Heater OFF	Heater ON	Air fluff
Dry time		30 min.	3 min.	12 min.	15 min.	same as normal timer program
		60 min.	3 min.	25 min.	32 min.	
		90 min.	4 min.	38 min.	48 min.	
		120 min.	6 min.	51 min.	63 min.	
		180 min.	9 min.	77 min.	94 min.	
Relay for heater	ON	10 sec.	ON		ON	
			Thermal temp. 85℃			
	OFF			OFF		

Drying process (Normal timer course)

		α (min.)	β (min.)	γ (min.)	Air fluff					Dry keep
					Temp.	~25	25~35	30~35	35~	
Dry time	30 min.	10 min. (t 1=10 min.)	16 min. (t 2=1 min.)	4 min. (t 3=3 min.)	(min.)	1	1	1	3	2 hours
	60 min.	20 min. (t 1=20 min.)	36 min. (t 2=1 min.)	4 min. (t 3=3 min.)		1	1	1	3	
	90 min.	30 min. (t 1=30 min.)	40 min. (t 2=1 min.)	20 min. (t 3=3 min.)		1	1	1	3	
	120 min.	40 min. (t 1=40 min.)	40 min. (t 2=1 min.)	40 min. (t 3=3 min.)		1	1	1	3	
	180 min.	60 min. (t 1=60 min.)	60 min. (t 2=1 min.)	60 min. (t 3=3 min.)		1	1	1	3	
Tub r.p.m	700 r/min 35 r/min 0 r/min	t1	Flapping t2 t2 1 min. 1 min. 10 min.+α	Flapping only ② ① ② t3 t3 3 min. 8 sec.	Flapping only					Flapping (Once in 5 min.)
Flapper 150 r.p.m		①1.5 sec. on - 1.0 sec. off×2 times (clockwise 50rpm) ②1.0 sec. on - 1.0 sec. off×2 return (50rpm) (150rpm) ③0.3 sec. on - 1.2 sec. off×2 return	①1.5 sec. on - 1.0 sec. off×2 times (clockwise 50rpm) ②1.0 sec. on - 1.0 sec. off×2 return (50rpm) (150rpm) ③0.3 sec. on - 1.2 sec. off×10 min.	①1.0 sec. on - 2.0 sec. off×1 return (50rpm) (150rpm) ②0.4 sec. on - 1.2 sec. off	0.4 sec. on - 1.2 sec. off					0.3 sec. on - 1.2 sec. off×2 return

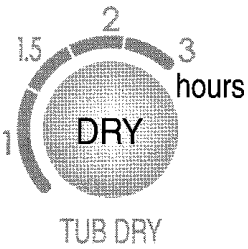
☆Heater temperature shall be controled by TH-3., (85℃:5 min. ON, 1 min. OFF) and (90℃:1 min. ON, 5 min. OFF)

3.2. Use the " TUB DRY " function to prevent black mold

Activating "Tub Dry" after the wash is complete eliminates the humidity in the tub that is one cause of black mold. (Activate once a week)

1. **Turn on the power supply**
   Press DRY to select "Tub Dry".
2. **Close the inner cover and the lid and press START**

   The washing machine will rotate the tub quickly and blow in hot air for roughly 30 minutes.



The operation is finished when the buzzer sounds.

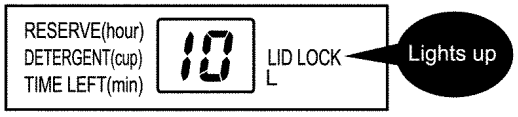
NOTE

- The occurrence of black mold in the tub depends on the usage environment.
- Once black mold has formed, activating "Tub Dry" will not remove it.

3.3. Lid lock and release

The lid lock is set during "Rinse", "Spin", "First half drying" and "Tub Dry"

(The lid is locked)



Note

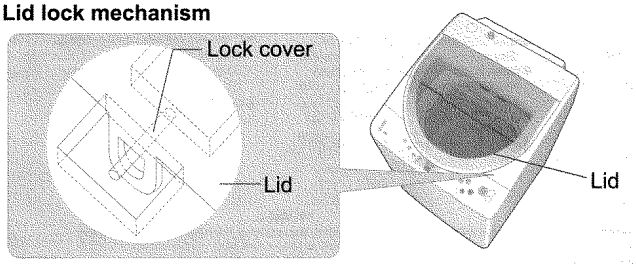
- Do not apply force to open the lid when locked. (You may damege the lid)

Caution

- Do not pull out the power plug. (The lock will not be released)

●By changing the tub rotation brake mechanism from "Mechanical" to "Electric", the lock can only be released when there is a power supply present.
●If the washing machine is turned OFF, turn the switch ON.
※In the event of a power outage, wait for the power to return before turning the switch ON.

Lid lock mechanism



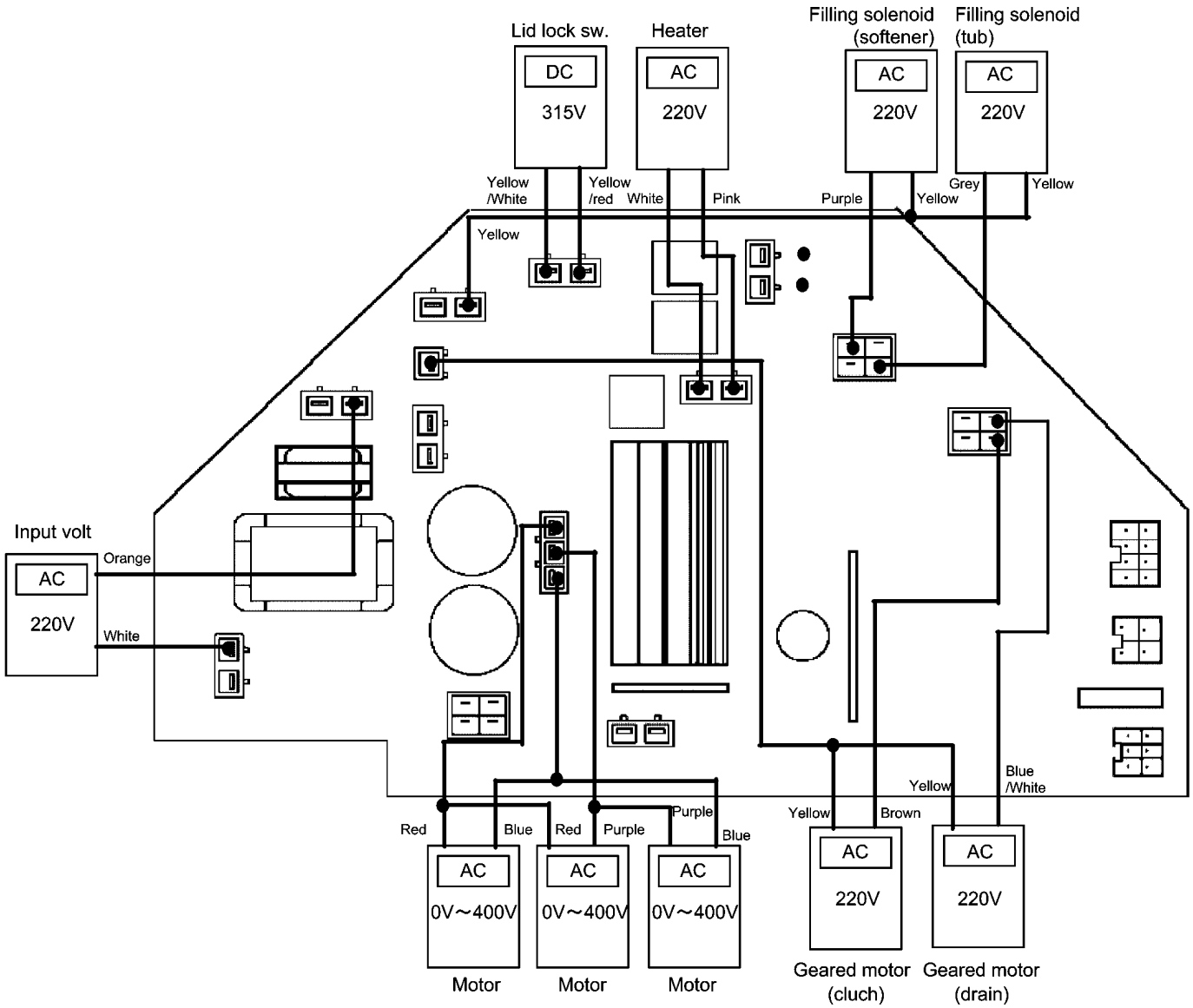
To release the lid lock

Press START HOLD and wait for the snapping sound.

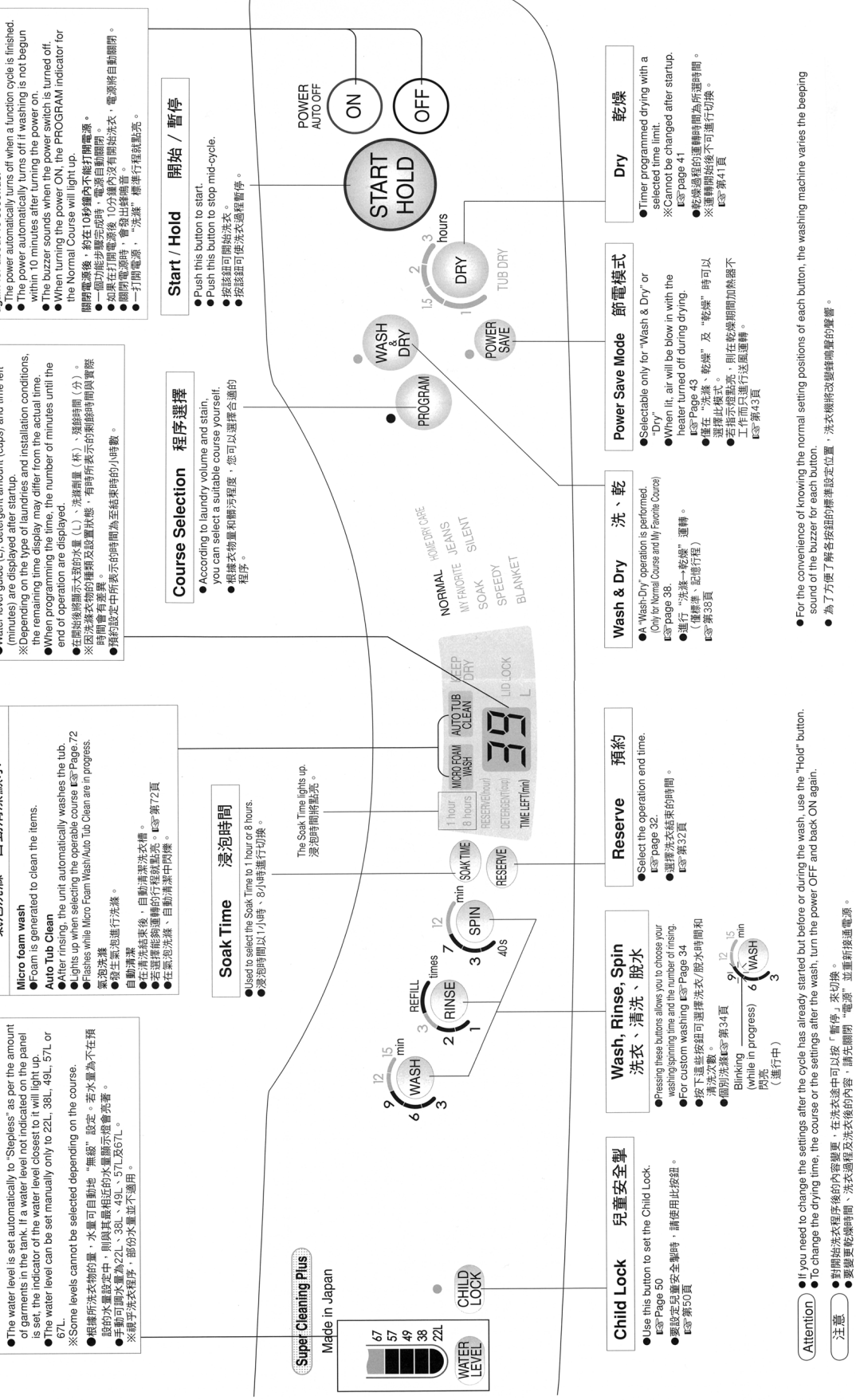
The lock is released when the tub stops rotating.
※The tub stops rotating after about 15 seconds.

4 CHECK INPUT AND OUTPUT VOLTAGE OF THE PC.BOARD

1. Before replace PC.Board, check input and output voltage of the PC.Board.
2. Check range of the test meter.
3. When check output voltage of the PC.Board, set a program of the Washing Machine on the working mode.
4. Incase of measuring the motor circuit, Confirm all of 3 conbinations (Red-Purple, Red- Blue and Blue-Purple) weather normal conditions or not.
5. Incase of measuring push switch circuit, It shall not be pressed Power-ON button measured AC 220V, And press Power-ON button once to change AC 0V.



5 OPERATIONS


Power Switch 電源開關
After having turned the power OFF, it cannot be turned ON again for about 10 seconds.
●The power automatically turns off when a function cycle is finished.
●The power automatically turns off if washing is not begun within 10 minutes after turning the power on.
●The buzzer sounds when the power switch is turned off.
●When turning the power ON, the PROGRAM indicator for the Normal Course will light up.
關閉電源後，約在10秒鐘內不能打開電源。
●一個功能步驟完成時，電源自動關閉。
●如果在打開電源後 10分鐘內沒有開始洗衣，電源將自動關閉。
●關閉電源時，會 發出蜂鳴音。
●一打開電源，“洗滌”標準行程就點亮。
Start / Hold 開始 / 暫停
●Push this button to start.
●Push this button to stop mid-cycle.
●按該鈕可開始洗衣。
●按該鈕可使洗衣過程暫停。
Water Level/Detergent Amount/Time Remaining display
“水量、洗滌劑量、剩餘時間”顯示
●Water level guide (L), detergent amount (cups) and time left (minutes) are displayed after startup.
※Depending on the type of laundries and installation conditions, the remaining time display may differ from the actual time.
●When programming the time, the number of minutes until the end of operation are displayed.
●在開始後將顯示大設的水量（L）、洗滌劑量（杯）、殘餘時間（分）。
※因洗滌衣物的種類及設置狀態，有時所表示的剩餘時間與實際時間會有差異
●預約設定中所表示的時間為至結束時的小時數。
Course Selection 程序選擇
●According to laundry volume and stain, you can select a suitable course yourself.
●根據衣物量和髒污程度，您可以選擇合適的程序。
NORMAL
HOME DRY CARE
MY FAVORITE
JEANS
SOAK
SILENT
SPEEDY
BLANKET
POWER AUTO OFF
ON
OFF
START HOLD
WASH & DRY
PROGRAM
POWER SAVE
1.5
2
3
hours
DRY
TUB DRY
Micro Foam Wash/Auto Tub Clean Indicator
氣泡洗滌、自動清潔顯示
Micro foam wash
●Foam is generated to clean the items.
Auto Tub Clean
●After rinsing, the unit automatically washes the tub.
●Lights up when selecting the operable course ☞Page.72
●Flashes while Micro Foam Wash/Auto Tub Clean are in progress.
氣泡洗滌
●發生氣泡進行洗滌。
自動清潔
●在清洗結束後，自動清潔洗衣槽。
●若選擇能夠設置的行程就點亮。☞第72頁
●在氣泡洗滌、自動清潔中閃爍。
Water Level 水量
●The water level is set automatically to “Stepless” as per the amount of garments in the tank. If a water level not indicated on the panel is set, the indicator of the water level closest to it will light up.
●The water level can be set manually only to 22L, 38L, 49L, 57L or 67L.
※Some levels cannot be selected depending on the course.
●根據所洗衣物的量，水量可自動地“無級”設定。若水量為不在預設的水量設定中，則與其最相近的水量顯示燈會亮著。
●手動可調水量為22L、38L、49L、57L及67L。
※碗乎洗衣程序，部份水量並不適用。
67
57
49
38
22L
WATER LEVEL
Soak Time 浸泡時間
●Used to select the Soak Time to 1 hour or 8 hours.
●浸泡時間以1小時、8小時進行切換。
The Soak Time lights up.
浸泡時間將點亮。
1 hour
8 hours
MICRO FOAM WASH
AUTO TUB CLEAN
KEEP DRY
RESERVE(hour)
DETERGENT(cup)
39
LID LOCK
TIME LEFT(min)
Super Cleaning Plus
Made in Japan
CHILD LOCK
SOAK TIME
RESERVE
min
12
15
9
6
3
WASH
REFILL
times
3
2
1
RINSE
12
7
3
SPIN
40s
Child Lock 兒童安全鎖
●Use this button to set the Child Lock. ☞Page 50
●要設定兒童安全鎖時，請使用此按鈕。☞第50頁
Wash, Rinse, Spin
洗衣、清洗、脫水
●Pressing these buttons allows you to choose your washing/spinning time and the number of rinsing.
●For custom washing ☞Page 34
●按下這些按鈕可選擇洗衣/脫水時間和清洗次數。
●個別洗滌☞第34頁
Blinking (while in progress) 閃亮（進行中）
12
15
min
9
6
3
WASH
Reserve 預約
●Select the operation end time. ☞page 32.
●選擇洗衣結束的時間。☞第32頁
Wash & Dry 洗、乾
●A “Wash-Dry” operation is performed. (Only for Normal Course and My Favorite Course) ☞page 38.
●進行“洗滌→乾燥”運轉。（僅標準、記憶行程）☞第38頁
Power Save Mode 節電模式
●Selectable only for “Wash & Dry” or “Dry”
●When lit, air will be blow in with the heater turned off during drying. ☞Page 41
●選擇在“洗滌、乾燥”及“乾燥”時可以選擇此模式。
●若指示燈點亮，則在乾燥期間加熱器不工作而只進行送風運轉。☞第43頁
Dry 乾燥
●Timer programmed drying with a selected time limit.
※Cannot be changed after startup. ☞page 41
●乾燥過程的運轉時間為所選時間。
※運轉開始後不可進行切換。☞第41頁
Attention
●If you need to change the settings after the cycle has already started but before or during the wash, use the “Hold” button.
●To change the drying time, the course or the settings after the wash, turn the power OFF and back ON again.
注意
●對開始洗衣程序後的內容變更，在洗衣途中可以按「暫停」來切換。
●要變更乾燥時間、洗衣過程及洗衣後的內容，請先關閉“電源”並重新接通電源。
●For the convenience of knowing the normal setting positions of each button, the washing machine varies the beeping sound of the buzzer for each button.
●為了方便了解各按鈕的標準設定位置，洗衣機將改變蜂鳴聲的聲響。

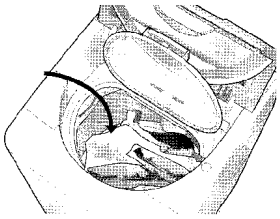
6 DRYING TIPS

Keypoints for drying　　為取得更好的乾燥效果

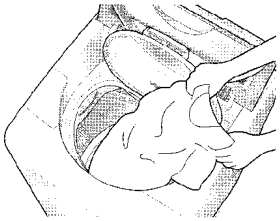
■To ensure the least wrinkling
■為減少乾燥後的折皺

●Hold the operation and switch the items on top for those on the bottom. (Less tangling and less wrinkling results.)
●在運轉中途使其暫停，並將衣物的上下位置顛倒。（衣物疏鬆，折皺減少）

●Decrease the load from 3.0kg to 2.1 ~ 2.4kg.
●放入少於乾燥容量（3.0kg）的衣物（2.1~2.4kg）。



●When the buzzer sounds, take the items out immediately.
●報知結束的蜂鳴器響後，馬上取出衣物。

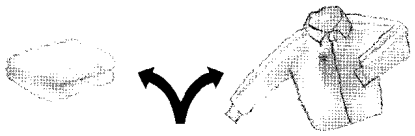


■To eliminate uneven dryness

●Do not put too many items in the washing machine.
●Separate difficult to dry items (cottons, heavy garments) from easy to dry items (synthetics).
●Do not dry items that are not spin-dried enough.
●Clean the exhaust filter and the intake filter after every run.
●Hold the operation and remove already dried items. (Light items such as synthetics (fleece) rise to the top rendering other items difficult to dry.)

■為減少乾燥不勻現象

●不要放入過多衣物。
●將不易乾的衣物（棉料、厚料的衣物）與易乾的衣物（化纖料）分開乾燥。
●不要在未充份脫水的狀態下進行乾燥。
●要每次清掃排氣過濾網、吸氣過濾網。
●在運轉中途使其暫停，先將已乾的衣物取出。（化纖（絨毛狀衣物）等較輕的衣物乾燥後，容易轉到上面去，這使別的衣物難乾。）



Hints about shrinking　　關於乾燥引起的收縮問題

There are many types of garments that shrink just by wetting, washing and drying them. This occurs because the elasticity worked into them during fabric processing returns to its original state when washing. Drying may result in even more shrinkage.
一般來說，將衣物浸於水中，進行洗滌並乾燥後，往往會出現收縮現象。這是因為布料加工時所施加的張力因洗滌而消失。經過運轉乾燥後，有時收縮會更嚴重。

■Cottons, linens and other knits

●Mechanical energy is applied to cottons, linens and other knits when drying leading to clogging and shrinking of the stitch loops.

■棉、麻等的針織品

●將棉、麻針織品進行運轉乾燥時，會施加以機械力，使針織孔堵塞，從而有可能引起收縮。

■Synthetic garments

●The synthetic fabric itself shrinks due to the applied heat when drying.

■化纖衣物

●化纖本身在受熱時，有可能出現收縮。

■To reduce shrinkage

●Make sure to check the illustrations and material appearing on the tag prior to drying.
●Drying garments first by hanging them outside and then putting them in the dryer makes great results. Learn to combine open-air drying with machine drying.
●Cottons that have shrunk down can be more or less brought back to their original shape by soaking and stretching them.

■為減少收縮

●在乾燥前，仔細確認衣物上的圖文表示及原材料表示。
●掛著晾至快乾時，再進行最終乾燥。這樣採取洗衣機與陽光乾燥結合。
●對已經收縮了的棉製品等衣物，使其充份浸濕後，再進行拉伸，便可一定程度地改善收縮。

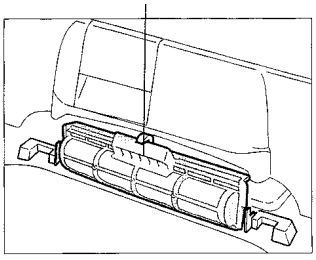
7 CHECK PRIOR TO START UP

■Check prior to start up

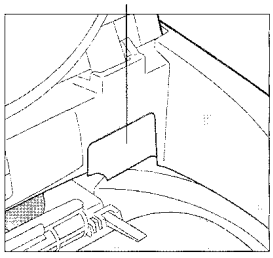
■Clean out the exhaust filter and the intake filter after every run. Reinsert them securely after cleaning them out.

■排氣過濾網，吸氣過濾網要每次清掃，並要安裝妥當。

●Exhaust filter ●排氣過濾網



●Intake filter ●吸氣過濾網



※Clogged filters diminish the washing machine's drying power.
※Not installing filters correctly will cause the accumulation of dust in the washing machine leading to malfunctions.
※若過濾網網眼堵塞，則乾燥效果會降低。
※若在過濾網未安裝好的情況下使用，洗衣機內會積存灰塵，從而造成故障。

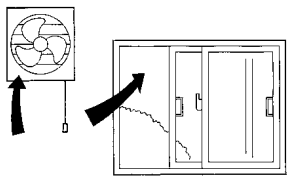
■運轉前的確認

■Ventilate well

To ensure the proper performance of the washing machine, make sure to ventilate well while the washing mashine is functioning.

■要充份換氣

為使乾燥效果良好，運轉中應進行充份換氣。



※Lack of ventilation may cause condensation in windows, walls and flooring due to a change in humidity level.
※換氣不充份時，有可能因溫度差而造成窗、牆及地板上結露水。

Power Save　關於節電模式

Lights up 點亮

POWER SAVE

Because the washing machine blows only air into the tub without using the heater midway through the drying operation, it reduces energy consumption when drying.

- Selectable only for "WASH & DRY" and "DRY" courses.

※If selecting the Power Save mode, increase the set drying time to compensate for the loss in drying power.

在乾燥期間加熱器不工作而只進行送風運轉，所以能夠節省乾燥時的電費。

- 僅在“洗滌、乾燥”、“乾燥”行程時可以選擇。

※當選擇了節電模式時，乾燥衣物要比通常的乾燥來得慢，所以請設定較長的乾燥時間。

Keep Dry　關於乾燥柔軟保持

After drying, the pulsator rotates for 6 seconds every 5 minutes over a period of about 2 hours to maintain the fluffiness of the items. (light flashes while in progress)

- Drying is complete, quickly remove the items from the washing machine.

※Opening the lid while in progress will cut the power off.

- At the time of purchase, the default setting for Keep Dry is "OFF".

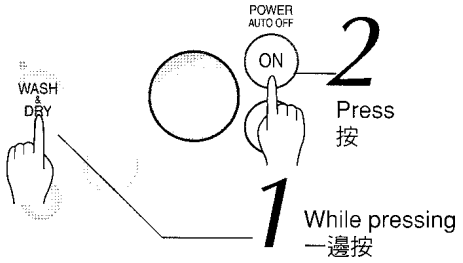
在乾燥結束後，每隔5分鐘旋轉葉輪旋轉6秒鐘進行運轉（約2小時），使衣物保持乾燥柔軟。（在乾燥柔軟保持中，指示燈閃爍。）

- 由於乾燥已經結束，所以請儘早取出衣物。

※若在中途打開蓋子，電源將會關閉。

- 在您剛買回家時，被設定在不進行乾燥柔軟保持狀態。

■How to set Keep Dry　■乾燥柔軟保持的設定方法



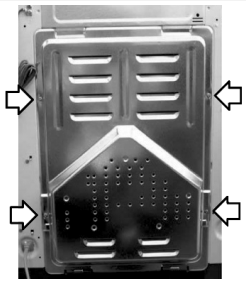
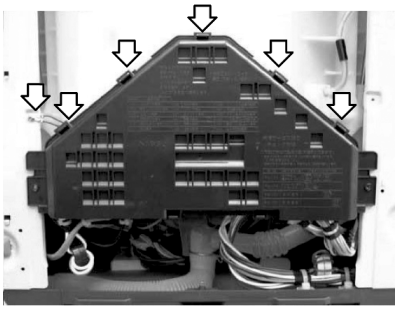
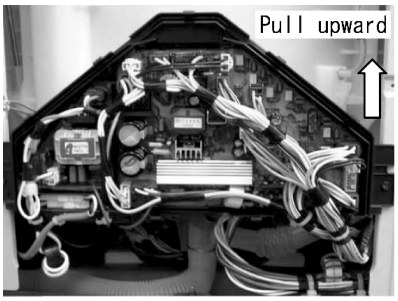
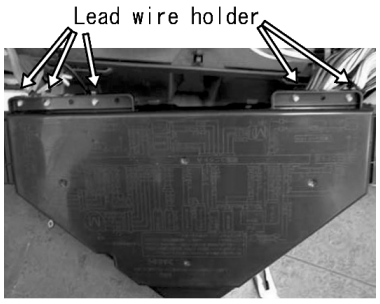
Press the power ON button while pressing down on the "WASH & DRY" button for at least 3 seconds.

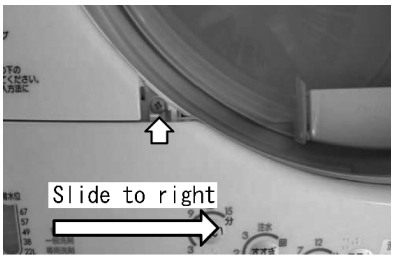
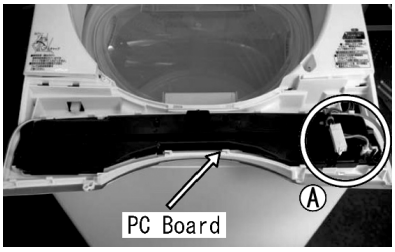
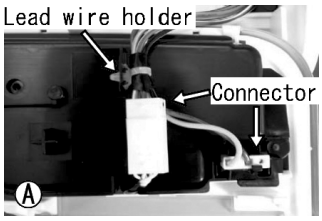
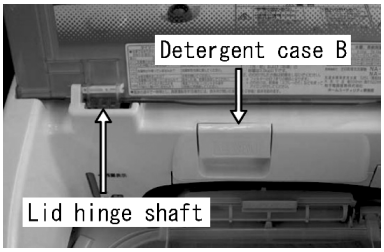
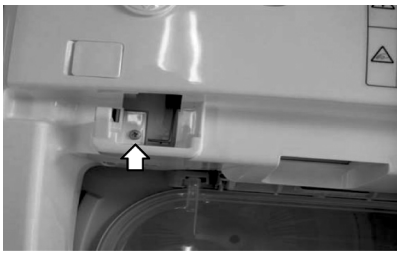
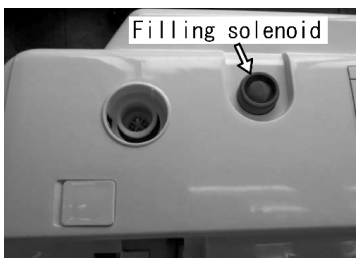
- The buzzer will sound once indicating that the "Keep Dry" setting is enabled. However, the indicator does not light up. Press "WASH & DRY" again and check if the indicator is lit up.
- To return Keep Dry to "OFF", repeat items 1 and 2. The buzzer will sound twice.

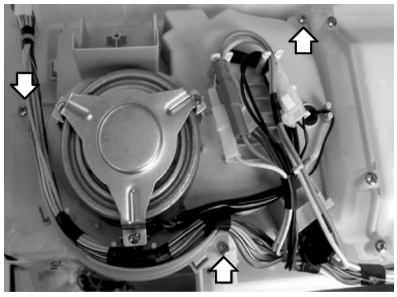
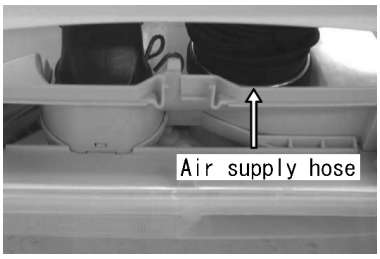
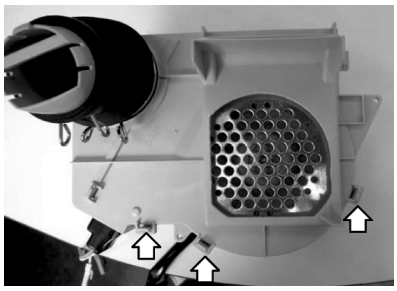
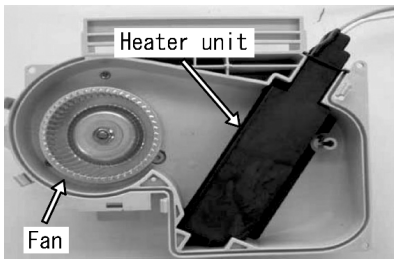
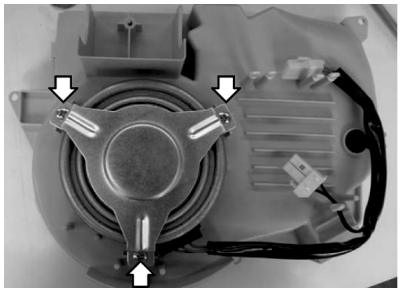
一邊按“洗滌、乾燥”按鈕一邊按電源“入（打開）”按鈕，持續按“洗滌、乾燥”按鈕3秒以上。

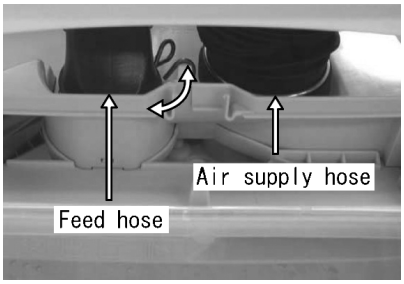
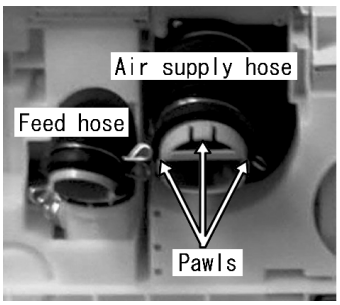
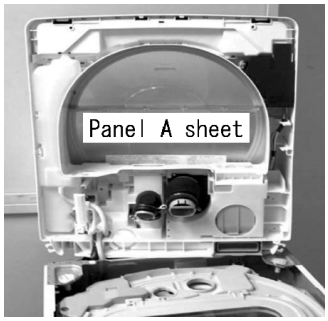
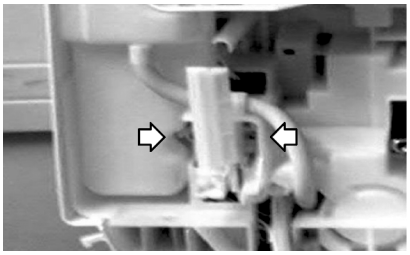
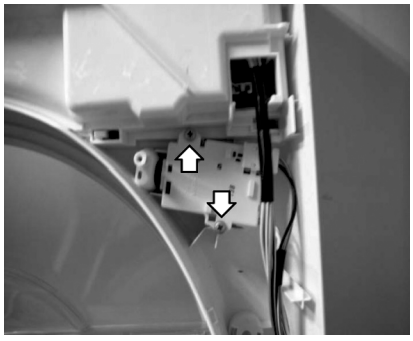
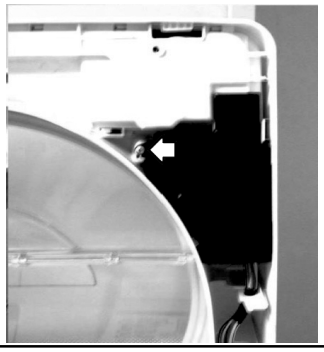
- 蜂鳴器鳴響一次（嗶嗶－），則表示“乾燥柔軟保持”已被設定好，但由於指示燈不點亮，所以請再按一次“洗滌、乾燥”按鈕以確認指示燈是否點亮。
- 要回復到“無”乾燥柔軟保持時，請再次進行1和2的操作。蜂鳴器將鳴響兩次。

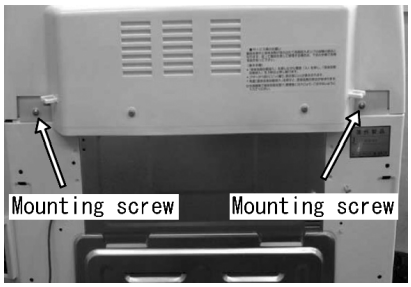
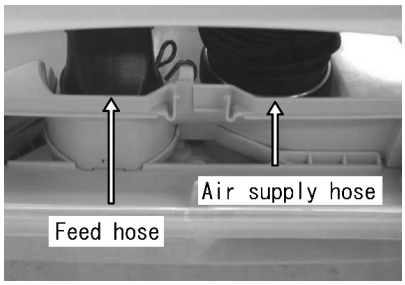
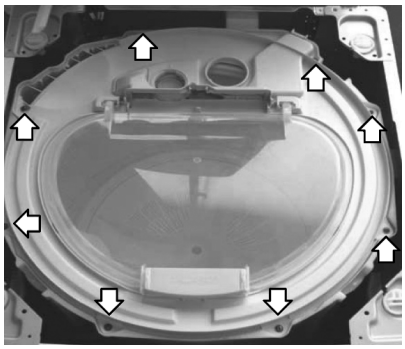
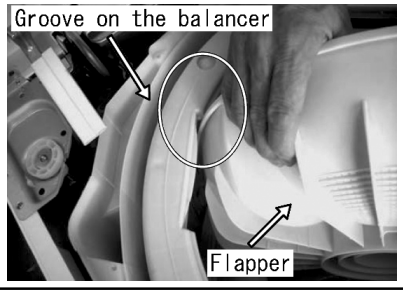
8 DISASSEMBLY INSTRUCTIONS AND ADJUSTMENTS

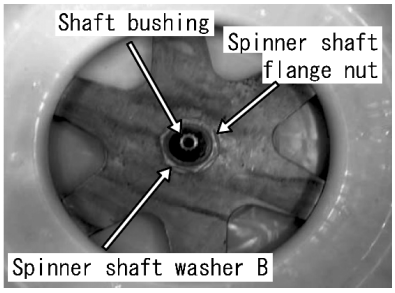
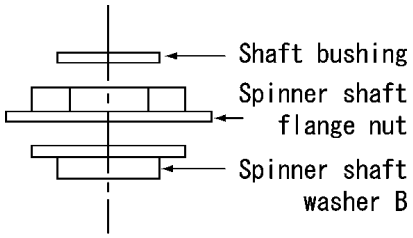
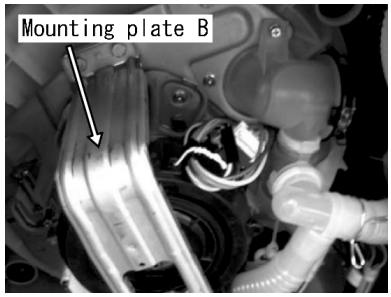
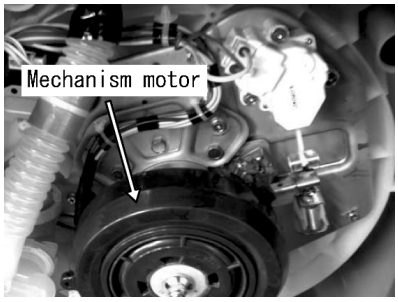
PC Board (Power side)		1 Remove the back panel.(4 screws)
		2 Remove the insulation spacer.(5 pawls) 3 Remove the earth wire.(1 screw)
		4 Remove connectors, and pull the PC Board upward to remove the PC Board w/components from the body.
		5 Remove the tip of the lead wire holder by using long nose pliers.

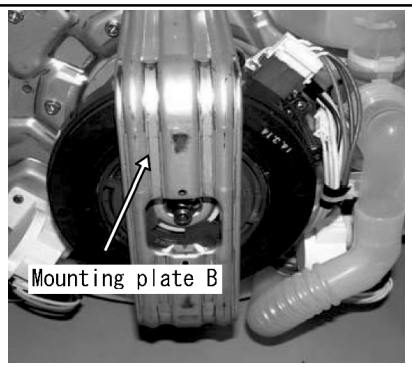
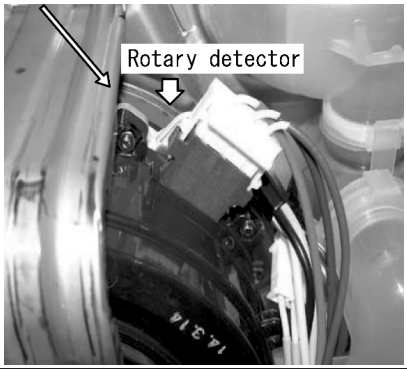
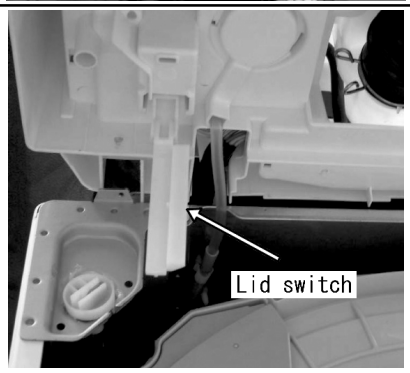
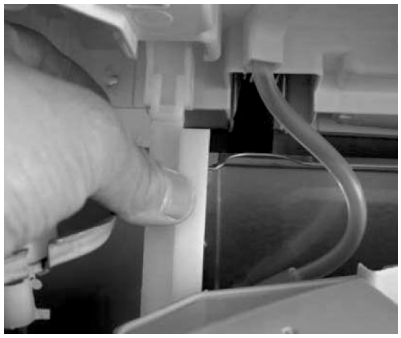
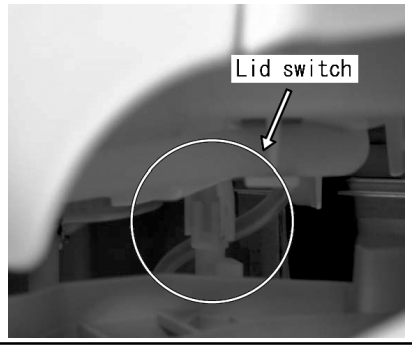
PC Board (Operation side)		1 Open the lid, and remove the panel A packing. After that, remove one screw mounting the panel face A. 2 Slide the panel face A to right to remove. 3 Turn the panel face A back side front.
		4 Remove pawls holding the PC Board. 5 Remove 2 connectors from the PC Board.
		6 Remove the lead wire holder by using the pliers.
Body B		1 Open the lid and remove the lid hinge shaft. After that remove the lid. 2 Pull out the detergent case B.
		3 Remove 2 screws mounting the body B. (Bottom portion of the both left and right of the lid)
		4 Remove 2 screws mounting the back side of the body B. 5 After pull up the back side of the body B, slide the body B frontward to remove. (Front portion shall be holded by pawls)
		* **Incase to remove the body B, Be careful at screw portion of the filling solenoid.** * **Incase to mount the body B, After set the sub tank to the body B.**

Heater Fan Fan motor		1 Remove the body B. (Refer page of the body B) 2 Remove the connector of the heater, detector and the motor. 3 Remove 3 screws mounting the fan case unit.
		4 After open the inner lid, remove the air supply hose after remove the pawls of the duct for holding the air supply hose.
		5 Take out the fan case unit, and remove pawls holding the fan case A, and remove the fan case C (Made of steel).
		**Replace the heater** 6 Take out the heater unit, and remove the heater. **Replace the fan** 6 Turn the nut clockwise to remove, and remove the fan.
		**Fan motor** 6 Turn the nut clockwise to remove, and remove the fan. 7 Remove 3 screws mounting the fan motor.

Lid lock switch Lid switch		1 Remove 2 screws mounting the body B.
		2 Turn the feed hose clockwise slightly to remove holding portion of the feed hose.
		3 Open the inner lid, and remove the air supply hose by removing pawls of the air supply hose.
		4 Slide the body B frontward after pulling up rear portion of the body B slightly. (Front portion of the body B shall be holded.) 5 Set the body B against wall as shown in figure.
		**Replace the lid switch** 6 Remove 2 screws mounting the lid switch. 7 Remove 2 connectors from the lid switch.
		**Replace the lid lock switch** 6 Remove a screw mounting the panel A sheet. (As shown right photo) 7 Remove 2 connectors from the lid lock switch. 8 Remove 2 screws mounting the lid lock switch. 

Mechanism case		1 Remove 2 screws mounting the body B.
		2 Turn the feed hose clockwise slightly to remove pawls, and remove the feed hose. 3 Open the inner lid, and remove the air supply hose by removing pawls of the air supply hose. 4 Slide the body B frontward after pulling up rear portion of the body B slightly. (Front portion of the Body B shall be holded.) 5 Set the body B against wall.
		6 Remove 8 screws and 1 pawl mounting the outer tub cover to remove.
		7 Remove the flapper. * **Do not remove mounting screw completely, hold the screw of the flapper and pulling out.** * **Incase to pull out the flapper from the tub, Remove 2 detergent inlet (Blue pocket) from the tub, so that the flapper shall be throughed at groove on the balancer.**

Mechanism case		8 Remove the shaft bushing, Spinner shaft flange nut and the spinner shaft washer B.  9 Pull upward the tub to remove.
		10 Lay down the machine on it nothing drain hose side. * **Please spread cloth to prevent scratch on the body.** 11 Remove 2 screws mounting the mounting plate B.
		12 Remove both connector for the motor and rotary detector. 13 Remove 6 screws mounting the mechanism motor.

Rotary detector		1 Lay down the machine on it nothing drain hose side. * **Please spread cloth to prevent scratch on the body.**
		2 Remove 2 screws mounting the rotary detector. 3 Remove the connector.
Caution to put the body B on to the body A		1 Before put the body B on to the body A, Check if the lever of the lid switch is not bent.
		2 Pull the tub frontward, and insert the lever properly. 3 After set the body B, check condition of the lever of the lid switch.
		* **How to check condition of the lid switch movement.** **If it is normal condition, In case to push the tub to lid switch lever side, water amount lamp shall be indicated 67L.**

9 TEST RUNNING WITHOUT WATER

9.1. METHOD TO TEST RUNNING WITHOUT WATER

1. Set the power switch to “OFF”.
2. Press and hold both the “Watet level” and “Wash” buttons with one hand.
3. Set the power switch to “ON“.
4. Release the your fingers from the buttons and power switch you pressed in step (2) and (3) above.(Check A and be carried out in this state with your fingers released.)
5. Within three seconds, press the “Water level“ button to set to the desired check procedure. (Carry out check B,C,D,E,G and H.)

Number of times the ”Water level” button is pressed	Check Mode	Check contents	Lamp illumination condition	Operation condition
0	A	· End signal · Time indication · Auto power off		· When the end buzzer sounds three times,”88” will simultaneously flash on and off in the remaining time display, and the power will automatically be switched off immediately after operation is finished. If other numbers or characters than “88” appear in the remaining time display, operate service check B-mode.
1	B	· Wash operation · Feed valve (To rinse case) operation		· Even if there is no water in the tub, the washing operation will continue for six minutes. · Press “Wash” button to change water flow. · During keep pressing “Rinse” button to check conducting condition of rinse case’s feed valve. · “H05,H08” is displayed in case of P.C.Board fault.
2	C	· Spin operation · Lid switch operation		· The spinning operation will continue for Eight minutes. · Incase contact point of the lid switch are OFF position, ”Lid” indication light up. · To check spin operation by opening the lid, press “Wash” button.
3	D	· Drying · Fan · Heater · Cock packing		· Drying process shall be operated 2 minutes. · Rotate the tub approx. 35 rpm, and operate the fan, heater and cock packing.
4	E	· Set water level 1 rank higher than laundry amount detector		· Press the wash button to change L0 to L1 and press Start/Hold button to confirm.
5	G	· Indicated Abnormal alarm of last 2 times		· “E” shall be indicated initially, Press “Wash” button to change last time to the time before last and return to E as initial mode. · If there were some abnormal alarm in the past, ”U or H” and some number shall be indicated mutually. If it had no abnormal alarm,”00” mark has displayed.
6	H	· Indicated operation times		· “C” shall be indicated initially, Press “Wash” button to change “Indication of digit of operation times. Press once:Digit “Thousand-Hundred” for washing Press twice:Digit “Ten-One” for washing Press 3 times:Digit ”Thousand-Hundred” for drying Press 4 times:Digit ”Ten-One” for drying Press 5 times to return to “C” digit.

9.1.1. Error indication descriptions

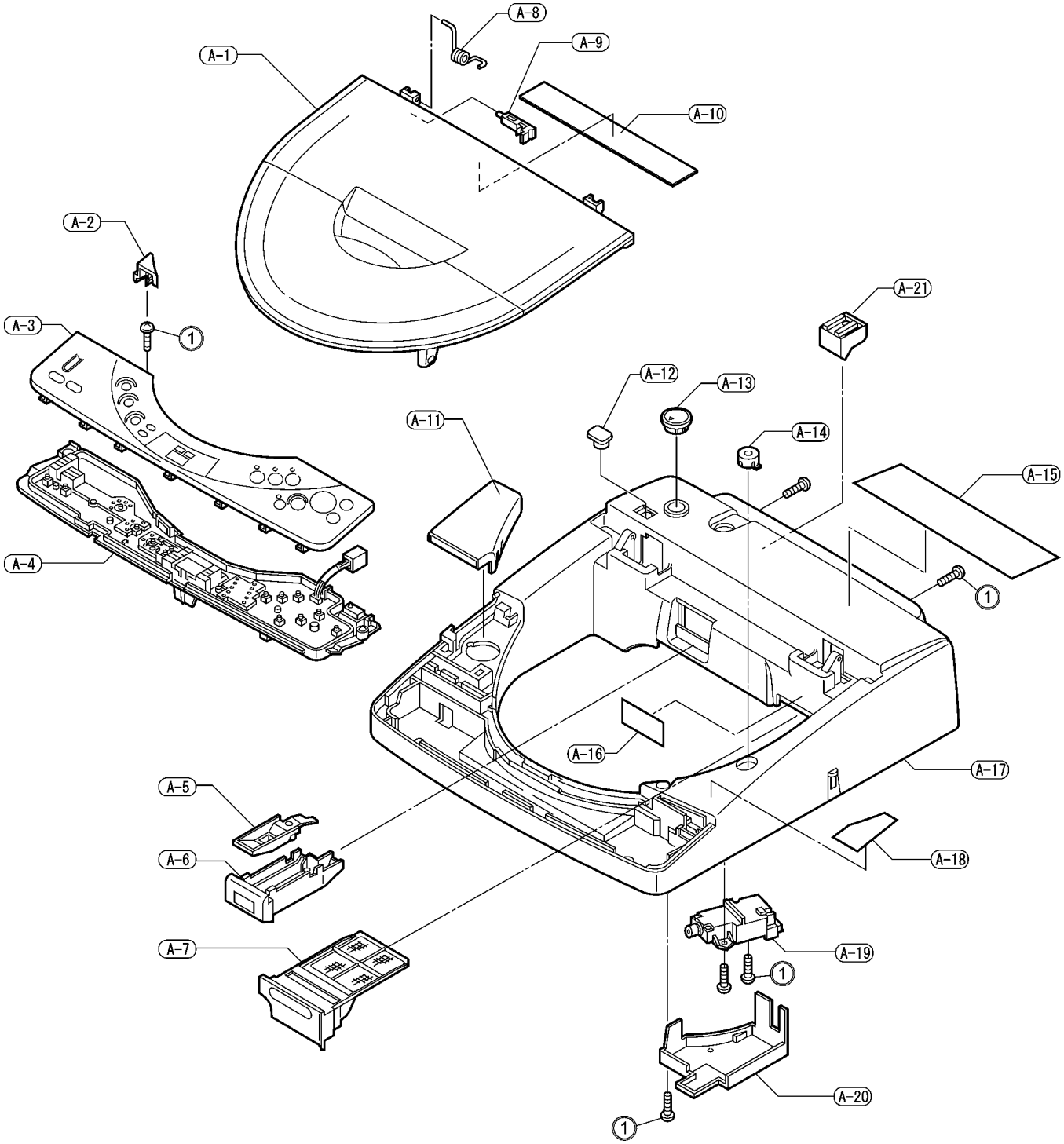
If there is an operation error, or if there is a problem with washing machine, operation shall be stopped and warning buzzer will sound (All of U and H21), and an error indication will be display-ed Alphabet and Number alternately.

Indication	Contents	Detect contents	Check point	Method to clear
U11	Malfunction of drain	Incase won't detect reset point in 6min.	· Is something wrong with the drain hose? · Is lint clogging it? · Is it kinked and takes more than 5 minutes to reset point? · Check if condition of the water level detector.	Opening and closing the lid.
U12	The lid is open	Lid is opening at spin process.	· Is the lid open? Close it. · Check if magnet on the lid. · Check if condition of contact point of the lid switch on the PC.Board.	Close the lid.
U13	Unbalanced load	Detect unbalanced load at spin process.	· Has the clothes accumulate into one side? · Has the unit been leveled?	Open the lid and redistribute the load.
U14	Malfunction of Water supply	It's takes over 30min. to reach selected water level.	· It's takes over 30min. to reach selected water level. · Check if condition of water faucet. · Check if condition of the feed valve and PC.Board.	Opening and closing the lid to return to initial stage of water supply.
U15	Water remain at drying process	Detect water more than reset point at drying process.	· Drain water from the tub by spin process.	Remove the power cord.
U25	Unbalanced load at drying	Detect unbalanced load at drying process.	· Has the clothes accumulate into one side? · Has the unit been leveled?	Open the lid and redistribute the load.
H01	Water level detector	Input freqency of water level detecter is out of rated frequency.	· Check if condition of the connectors. · Replace water level detector. · Replace PC.Board (Power side).	Press Power (Push) switch to OFF position.
H04	Short circuit of power relay on the PC.Board	Detect short circuit of the power relay on the PCB (Power).	· Check if condition of the Power (Push) switch (it shall be keeped condition). · Replace PC.Board (Power side). · Check if no leaking between body and lead wires.	Remove the power cord.
H05	Data shall not be memorized	Data won't saved (In case of service check-B).	· Replace PC.Board (Power side). · **Effected service mode (Check-B) only.**	Press Power (Push) switch to OFF position.
H07	Mulfunction of rotary detector.	No input signal from rotary detector when the motor ON.	· Check if condition of the connector and lead wire of the rotary detector. · Replace the mechanism motor. · Replace the PC.Board (power side).	Press power (push) switch to OFF position.
H09	Open circuit of PC.Board's communication line	Won't communicate between PCB (Power and Operation).	· Check if lead wire condition of PC.Board between power and operation side, and replace one of PC.Board's.	Remove the power cord.
H10	Malfunction of thermistor	Oper and short circuit of thermister (TH3)	· Check if condition of connector. · Replace the fun case B (thermistor) · **Open-circuit 206kΩ** · **Short-circuit 94kΩ**	Press Power (Push) switch to OFF position.
H21	Water shall be leaked from filling solenoid (feed valve)	Water level detector detect decreasing of water level.	· Clean the diaphragm inside of the feed valve or replace the feed valve. · Check if output voltage of the PC.Board (Power side). · **Operate Geared motor and drain water.**	Press Power (Push) switch to OFF position
H25	Mulfunction of Geared motor for drain.	Geared motor won't operate even if 20sec. past after start of drain.	· Check if condition of the connector for geared motor. · Replace the geared motor. · Replace the PC.Board (Power side).	Press Power (Push) switch to OFF position

Indication	Contents	Detect contents	Check point	Method to clear
H26	Mulfunction of clutch.	Geared motor won't operate in wash process.	· Check if condition of the connector for geared motor. · Replace the geared motor. · Replace the PC.Board (Power side).	Press Power (Push) switch to OFF position
H27	Mulfunction of door lock switch.	Lid lock switch won't operate even operating position.	· Check if condition of the connector for geared motor. · Replace the door lock switch. · Replace the PC.Board (Power side).	Press Power (Push) switch to OFF position
H51	Mulfunction of over loading.	No signal (1min.) from rotary detector in wash process.	· Check if condition of the connector for motor and rotary detector. · Replace mechanism motor. · Replace PC.Board (Power side).	Press Power (Push) switch to OFF position
H52	Mulfunction of high voltage.	Measured input voltage (20% higher).	· Check input voltage.	Auto-off
H53	Mulfunction of low voltage.	Measured input voltage (35% lower).	· Check input voltage.	Press Power (Push) switch to OFF position.
H55	High current in mechanism motor.	Over 4A flows in a circuit of mechanism motor.	· Replace PC.Board (Power side). · Short circuit of the mechanism motor.	Press Power (Push) switch to OFF position.
H56	High current in mechanism motor.	Over 4A flows in a circuit of mechanism motor.	· Replace PC.Board (Power side). · Short circuit of the mechanism motor.	Press Power (Push) switch to OFF position.
H57	Low magnetic current of mechanism motor.	Detect more pulse than low magnetic current.	· Replace the mechanism motor. · Replace the PC.Board (Power side).	Press Power (Push) switch to OFF position.
H59	Malfunction of fan motor	Fun motor won't reach rated rpm.	· Check if condition of the fan motor and the PC.Board (Power side).	Press Power (Push) switch to OFF position
H66	Malfunction of heater circuit	Detedt short and open circuit of the heater circuit.	· Check if condition of connector and lead wires. · Check if condition of the heater and PC.Board (Power side). · **If the heater is short-circuit, it will Auto-off.**	Press Power (Push) switch to OFF position

10 LOCATION

10.1. LOCATION OF PARTS-A

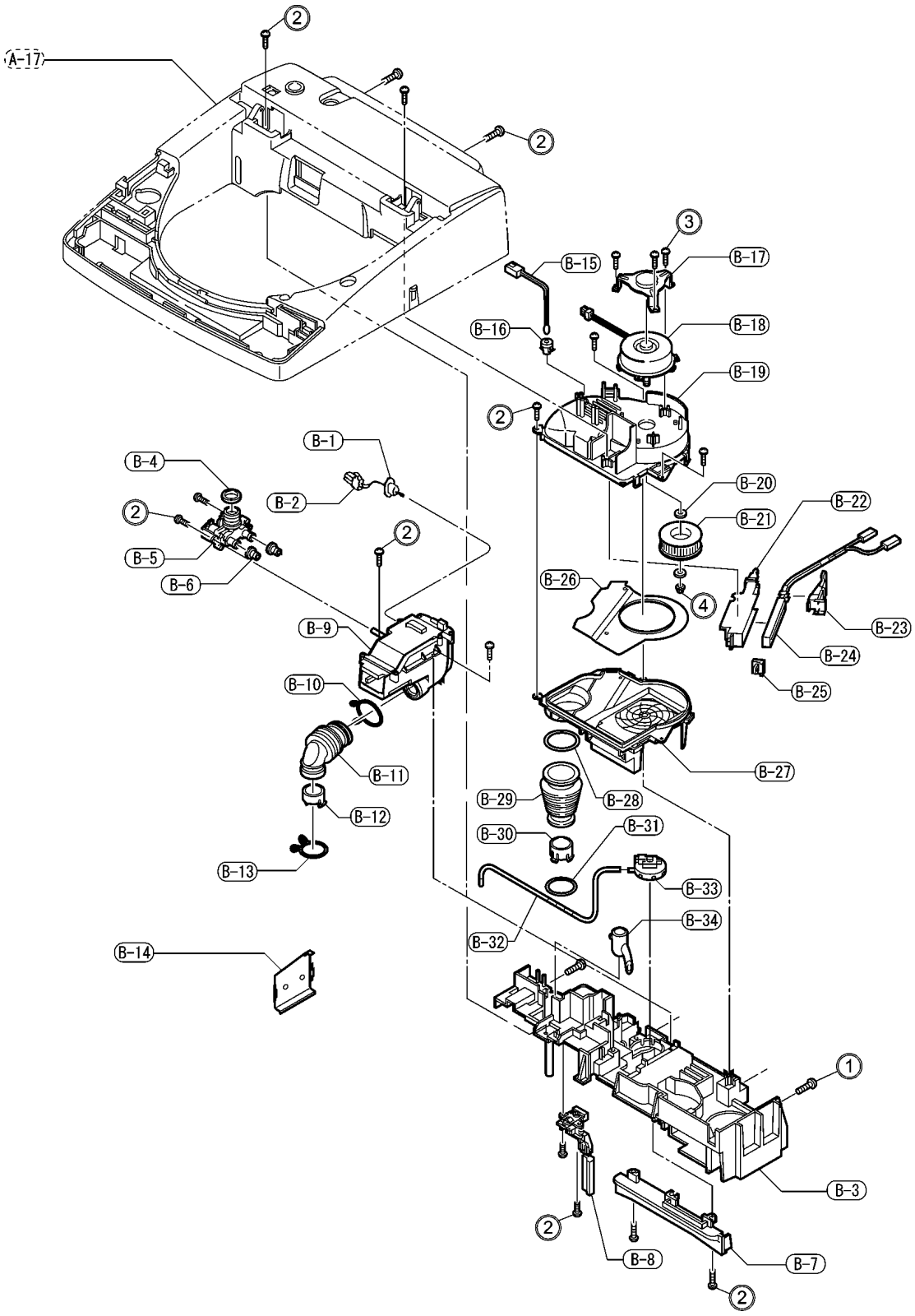


10.2. REPLACEMENT PARTS LIST-A

Ref. No.	Description	Part No.	Q'ty	Remarks
A- 1	Lid	AXW1GN6PD00	1	English
A- 1	Lid	AXW1GN6PD30	1	Thailand
A- 1	Lid	AXW1GN6PD50	1	Cantonese
A- 2	Panel A Packing	AXW137D6MJ0	1	
A- 3	Panel face A	AXW145D6PD00	1	
A- 4	PC Board w/components	AXW24S-6MM0	1	
A- 5	Rinse cap	AXW2192D6JU0	1	
A- 6	Detergent case B	AXW2151D6JU0	1	
A- 7	Inlet filter	AXW2258D6ML0	1	
A- 8	Lid spring	AXW1116-6MJ0	1	
A- 9	Lid hinge shaft	AXW193W5U80	1	
A-10	Caution label	AXW9908Z6PD0	1	English
A-10	Caution label	AXW9908Z6PD3	1	Thailand
A-10	Caution label	AXW9908Z6PD5	1	Cantonese
A-11	Side cover	AXW4600D6MK0	1	
A-12	Cap A	AXW514X6DK0	1	
A-13	Cap C	AXW537D6PD00	1	
A-14	Level meter	AXW353-6DK0	1	
A-15	Switch label	AXW657-6PD00	1	English
A-15	Switch label	AXW657-6PD30	1	Thailand
A-15	Switch label	AXW657-6PD50	1	Cantonese
A-16	Caution label	AXW9907Z6PD0	1	English
A-16	Caution label	AXW9907Z6PD3	1	Thailand
A-16	Caution label	AXW9907Z6PD5	1	Cantonese
A-17	Body B	AXW1BD6MM0	1	
A-18	Caution label	AXW1117Z6PD0	1	English/Cantonese
A-18	Caution label	AXW1117Z6PD3	1	Thailand
A-19	Door lock switch	AXW1619Z0506	1	220-240V
A-20	Panel A sheet	AXW143-6MJ0	1	
A-21	Holder B	AXW2498Z6PD0	1	

1	Screw	XTB4+15BFE	6	

10.3. LOCATION OF PARTS-B

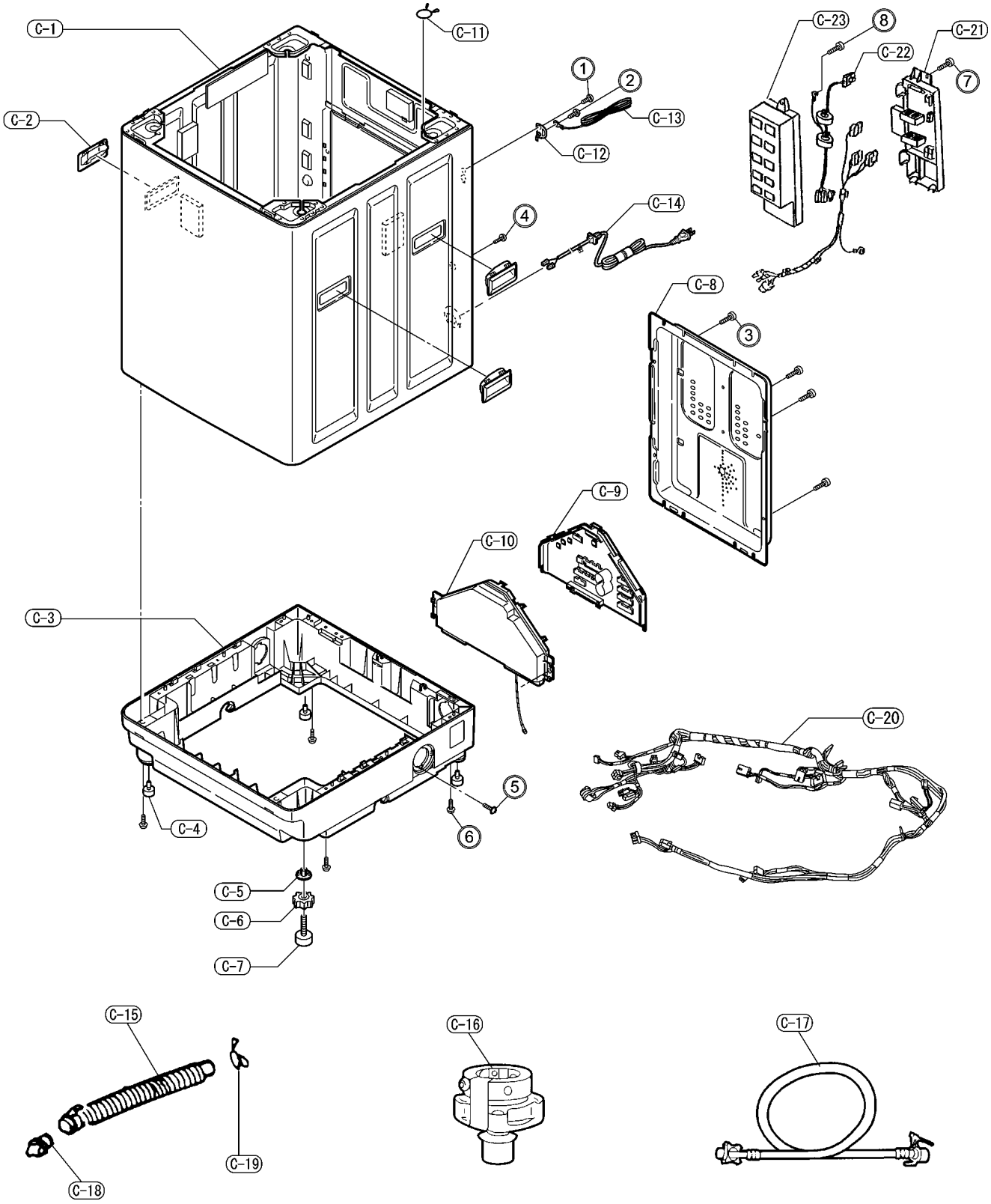


10.4. REPLACEMENT PARTS LIST-B

Ref. No.	Description	Part No.	Q'ty	Remarks
B- 1	Cord seal rubber	AXW2500Z6PD0	1	
B- 2	Thermal detector	AXW24N-01900	1	
B- 3	Holder A	AXW2497-6MJ0	1	
B- 4	Feeding port packing	AXW267-6ML00	1	
B- 5	Filling solenoid (Feed valve)	AXW29A-19606	1	220-240V
B- 6	Detergent case packing	AXW2164-6JU0	2	
B- 7	Cover of holder A	AXW162D6ML0	1	
B- 8	Safety switch	AXW1661-6JU0	1	
B- 9	Detergent case A	AXW2150Z6PD0	1	
B-10	Hose clamp	AXW245-5VP5	1	
B-11	Feed hose A	AXW1250-6MJ0	1	
B-12	Duct B	AXW2298-6MJ0	1	
B-13	Hose clamp	AXW245-6MJ0	1	
B-14	Tub holder	AXW175-6GT0	1	
B-15	Thermal detector	AXW24N-130	1	
B-16	Cord seal rubber	AXW2500-6MJ0	1	
B-17	Motor bracket A	AXW307-6ML0	1	
B-18	Motor	AXW401-6ML0	1	
B-19	Fan case A	AXW851D6ML0	1	
B-20	Fan washer A	AXW857-6ML0	2	
B-21	Fan	AXW855-6ML0	1	
B-22	Heater cover A	AXW1316-6ML0	1	
B-23	Heater plate A	AXW1307-6MJ0	1	
B-24	Heater	AXW13I-6PD00	1	220-240V
B-25	Heater plate B	AXW1308-6MJ0	1	
B-26	Fan case C	AXW872-6ML0	1	
B-27	Fan case B	AXW852D6ML00	1	Inc. hose clamp
B-28	Hose clamp	AXW428-6PF00	1	
B-29	Air supply hose	AXW314-6MJ00	1	Inc. hose clamp (2PCs.)
B-30	Duct A	AXW2297Z6MJ1	1	Inc. hose clamp
B-31	Hose clamp	AXW428-6PF00	1	
B-32	Air hose	AXW239-8340	1	
B-33	Water level detector	AXW24T-280	1	
B-34	Drain pipe	AXW205-6ML0	1	

1	Screw	XTWAXW461	2	
2	Screw	XTB4+15BFE	19	
3	Screw	XTB4+12BFE	2	
4	Nut	XNGAXW620	1	

10.5. LOCATON OF PARTS-C

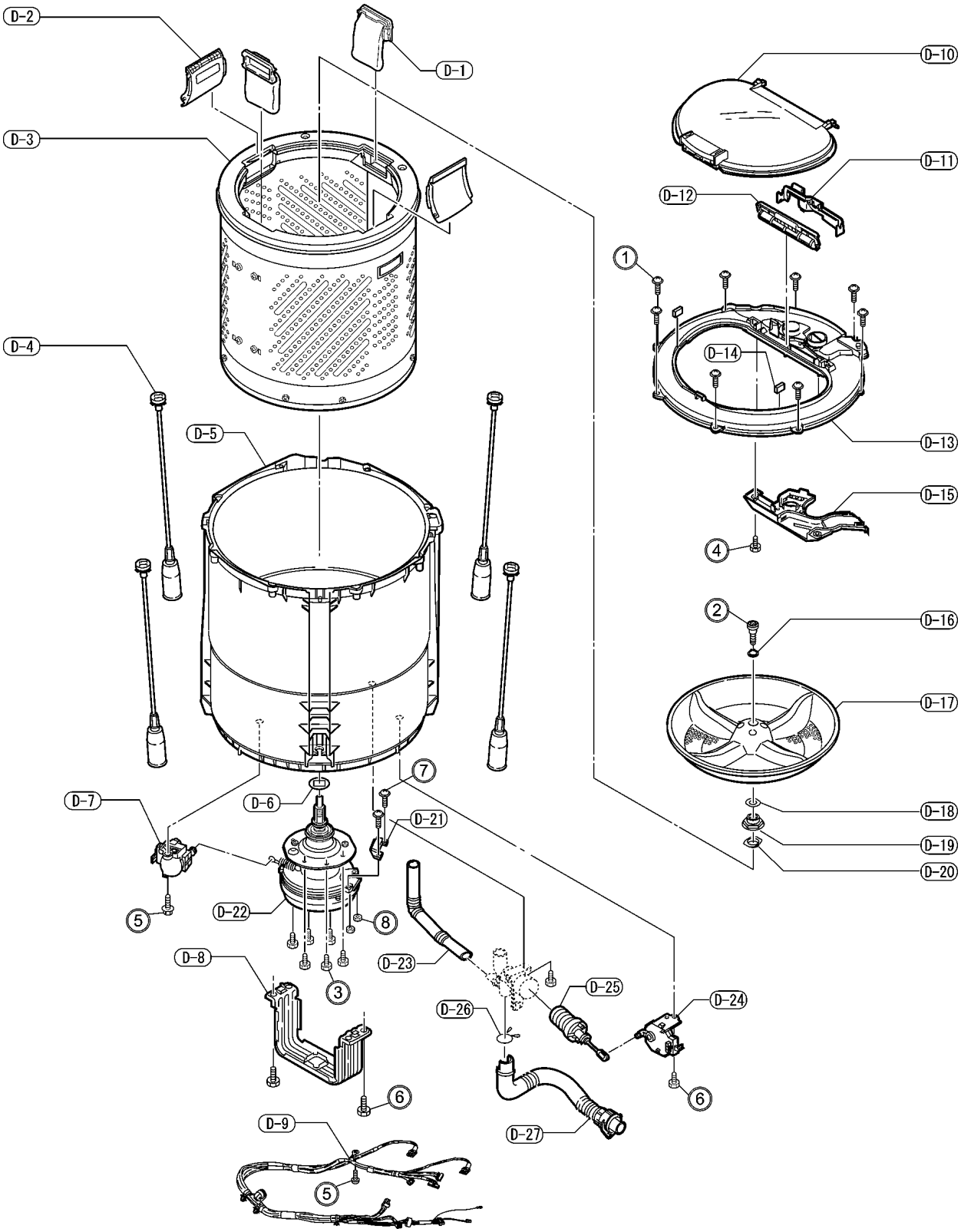


10.6. REPLACEMENT PARTS LIST-C

Ref. No.	Description	Part No.	Q'ty	Remarks
C- 1	Body A	AXW1AD6PD00	1	White
C- 2	Hanger	AXW110D6JU0	3	
C- 3	Base A	AXW301-6JV0	1	
C- 4	Leg covering	AXW339-6JV0	3	
C- 5	Adjustable leg plate	AXW337-56R0	1	
C- 6	Adjustable knob	AXW343-5YW0	1	
C- 7	Adjustable leg	AXW3D-6JV0	1	
C- 8	Back panel	AXW156-6JV0	1	
C- 9	Insulation cover	AXW486-6ML0	1	
C-10	PC Board w/components	AXW24C-6PD06	1	220-240V
C-11	Snap pin	AXW334-5U90	1	
C-12	Earth mounting plate	AXW333-6MJ0	1	For 2 pin cord
C-13	Earth wire	AXW3C-5150	1	For 2 pin cord
C-14	Power cord	----------	1	Obtain locally
C-15	Outlet hose B	AXW2EU5X9Z	1	
C-16	Filling joint A	AXW12H-9025	1	(Feed valve joint A)
C-17	Pressure hose	AXW1251-9065	1	
C-18	Hose pipe	AXW243-5X60	1	
C-19	Hose clamp	AXW245-6AA0	1	
C-20	Lead wire unit	AXW14A-6PD00	1	Upper side
C-21	PC Board w/components	AXW24V-6NB04	1	220-240V, Noise filter
C-22	Coil unit	AXW34L-6PD00	1	For 2 pin plug
C-22	Coil unit	AXW34L-6NB00	1	For 3 pin plug
C-23	Insulation cover	AXW2427Z6PD0	1	

1	Screw	XTN5+12H	1	
2	Screw	XSN5+10BNS	1	
3	Screw	XTWAXW420	4	
4	Screw	XTN4+8H	1	
5	Screw	XTWAXW425	1	
6	Screw	XTWAXW461	4	
7	Screw	XTWAXW462	1	
8	Screw	XSN5+10BNS	1	

10.7. LOCATION OF PARTS-D

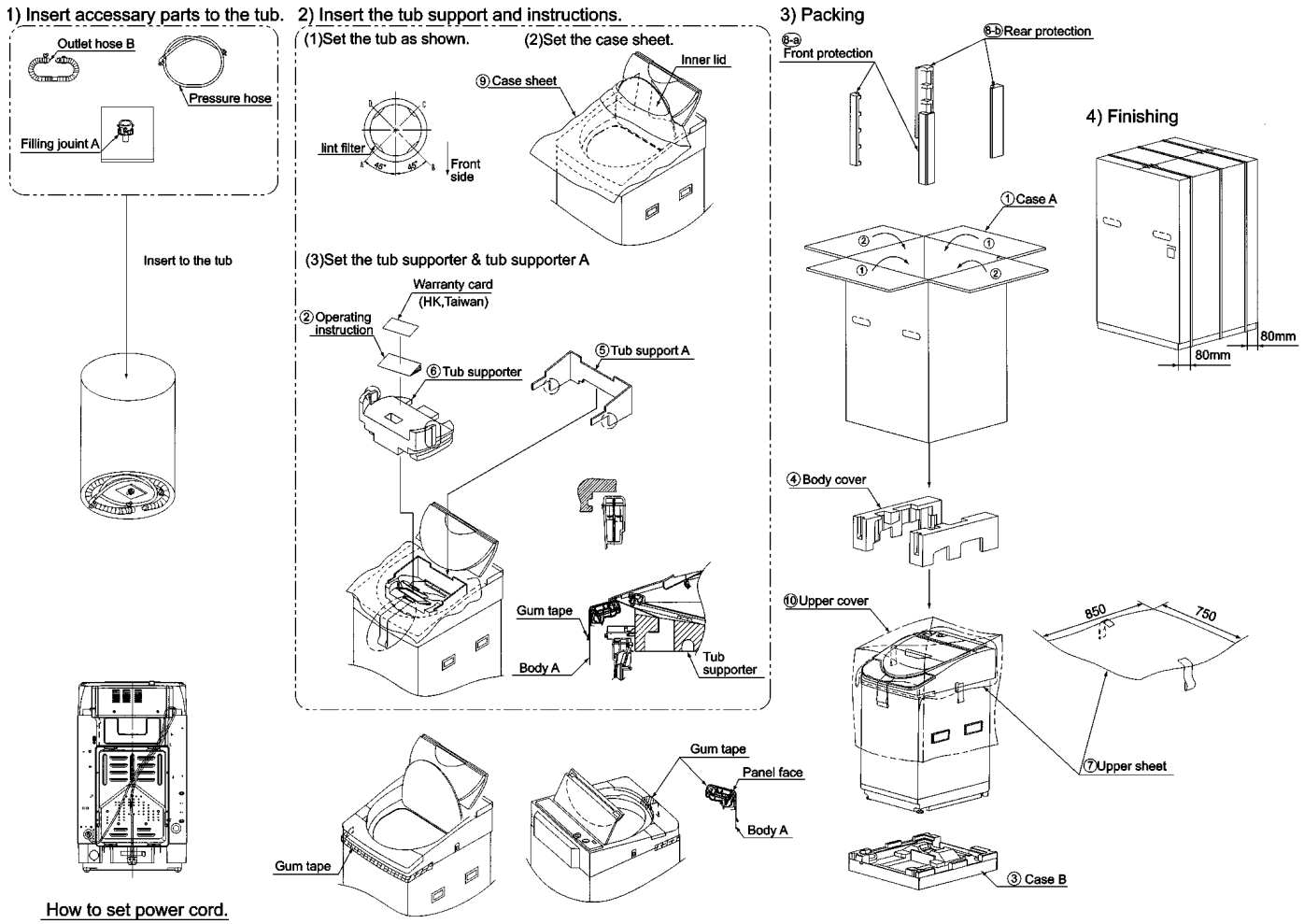


10.8. REPLACEMENT PARTS LIST-D

Ref. No.	Description	Parts No.	Q'ty	Remarks
D-1	Lint filter	AXW22A-6BM0	1	
D-2	Detergent inlet	AXW1198-6EM0	1	
D-3	Tub	AXW2A-6PD00	1	
D-4	Suspension unit	AXW340Z-6MJ0	1	1 set=4 PCs.
D-5	Outer tub	AXW12A-6ML0	1	Inc. D-23
D-6	Spinner flange washer A	AXW15P-6EN0	1	
D-7	Geared motor	AXW3482Z2606	1	220-240V, for clutch
D-8	Spinner plate B	AXW3232-6JU0	1	
D-9	Lead wire unit	AXW14B-6PE00	1	Lower side
D-10	Inner lid	AXW2T-6PD00	1	English
D-10	Inner lid	AXW2T-6PD30	1	Thailand
D-10	Inner lid	AXW2T-6PD50	1	Cantonese
D-11	Filter cover	AXW2208-6ML0	1	
D-12	Exhaust filter	AXW2360-6JV0	1	
D-13	Outer tub cover	AXW3224-6ML0	1	
D-14	Lid stopper A	AXW1141-6EM0	2	
D-15	Feeding port	AXW204-6ML0	1	
D-16	O ring	AXW257-6BM0	1	
D-17	Pulsator	AXW5E-6JV0	1	Inc. D-16
D-18	Shaft bushing	AXW504-6BM0	1	
D-19	Spinner flange nut	AXW1517-5U80	1	
D-20	Spinner shaft washer B	AXW1519-8020	1	
D-21	Rotary detector	AXW26M-6EM0	1	
D-22	Mechanism motor	AXW20M-6MJ0	1	Inc. D-6, 18, 19, 21
D-23	Overflow hose B	AXW234-6JU0	1	
D-24	Geared motor	AXW3482Z2806	1	220-240V, for drain
D-25	Cock complete	AXW9D-6MJ0	1	
D-26	Hose clamp	AXW245-5320	1	
D-27	Service hose A	AXW2DD6JE0	1	

1	Screw	XTWAXW464	8	
2	Screw	XSSAXW678	1	
3	Bolt	XVGAXW812	6	
4	Screw	XTTAXW431	2	
5	Screw	XTN5+12H	2	
6	Screw	XTWAXW6505	3	
7	Screw	4002325	2	
8	Nut	XNG4BBS	2	

10.9. PACKING PARTS LIST



Ref. No.	Description	Part No.	Q'ty	Remarks
1	Case A	AXW9001N6PD0	1	Standard
1	Case A	AXW9001N6PDA	1	Singapore
1	Case A	AXW9001N6PD3	1	Thailand
2	Operating instructions	AXW9901Z6PD0	1	English/Arabic
2	Operating instructions	AXW9901Z6PD3	1	Thailand
2	Operating instructions	AXW9901Z6PD5	1	English/Cantonese
3	Case B	AXW90B-6PD00	1	
4	Body cover	AXW9004Z6PD0	1	
5	Tub supporter A	AXW9054Z6PD0	1	
6	Tub supporter	AXW9085Z6PD0	1	
7	Upper sheet	AXW9069-6MJ0	1	
8-a	Front cover	AXW9215Z6PD0	2	
8-b	Rear cover	AXW9215Z6PD5	2	
9	Case sheet	AXW9020-6GT0	1	
10	Upper body cover	AXW9060Z6PL0	1	